

STN- Search Summary (09856200)

D HIS

(FILE 'HOME' ENTERED AT 18:45:45 ON 02 MAY 2006)

FILE 'MEDLINE, CAPLUS, BIOSIS, WPIDS, AGRICOLA, EMBASE' ENTERED
AT

18:46:53 ON 02 MAY 2006

L1 25836 S (GP120 OR GP 120)

L2 957 S L1 (5A) (STRUCTUR? OR CRYSTAL? OR COORDINAT? OR XRAY
OR X-RAY

L3 459 DUP REM L2 (498 DUPLICATES REMOVED)

L4 459 SORT L3 PY A

L5 110 S L4 AND (BINDING SITE)

L6 84 S L5 AND (CD4 OR CD 4)

L7 84 DUP REM L6 (0 DUPLICATES REMOVED)

L8 84 SORT L6 PY A

L9 53 S L4 AND (INHIBITOR OR ANTAGONIST OR AGONIST OR
MODULATOR)

L10 120 DUP REM L8 L9 (17 DUPLICATES REMOVED)

L11 120 SORT L10 PY A

WEST Search History

DATE: Tuesday, May 02, 2006

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>	
<input type="checkbox"/>	L26	L24 AND (crystal\$ OR coordinate\$ OR xray OR X-ray)	11
<input type="checkbox"/>	L24	L23 AND L17	23
<input type="checkbox"/>	L23	kwong\$-peter\$.in. OR hendrickson\$-wayne\$.in. OR sodroski\$-joseph\$.in. OR wyatt\$-richard\$.in.	107
<input type="checkbox"/>	L20	L17 NEAR5 (crystal\$ OR coordinate\$ OR xray OR X-ray)	56
<input type="checkbox"/>	L18	L17 SAME (crystal\$ OR coordinate\$ OR xray OR X-ray)	222
<input type="checkbox"/>	L17	L16 OR L10	7634
<input type="checkbox"/>	L16	gp ADJ 120	2683
<input type="checkbox"/>	L10	gp120	5827

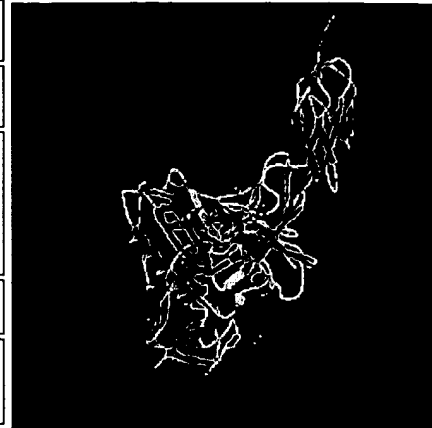
END OF SEARCH HISTORY

Pub Med Search History (09856200)

• <u>#34</u> Search #33 AND #1	18:30:41	<u>35</u>
<u>#33</u> Search "X-Ray Diffraction"[MeSH]	18:29:32	<u>46042</u>
<u>#32</u> Search #30 OR #24	18:29:16	<u>37</u>
<u>#30</u> Search #29 AND #1	18:28:38	<u>31</u>
<u>#29</u> Search "Crystallography, X-Ray"[MeSH]	18:28:24	<u>27664</u>
<u>#24</u> Search #23 AND #1	18:23:54	<u>37</u>
<u>#23</u> Search "Crystallography"[MeSH]	18:22:29	<u>51584</u>
<u>#22</u> Search #21 AND #1	18:22:04	<u>1494</u>
<u>#21</u> Search "Molecular Structure"[MeSH]	18:21:49	<u>793294</u>
<u>#16</u> Search #15 AND #1	18:20:33	<u>60</u>
<u>#15</u> Search "Protein Structure, Tertiary"[MeSH]	18:16:15	<u>46541</u>
<u>#10</u> Search #1 AND #9	18:15:32	<u>120</u>
<u>#9</u> Search "Structure-Activity Relationship"[MeSH]	18:06:58	<u>106137</u>
<u>#8</u> Search #1 AND #7	18:06:36	<u>0</u>
<u>#7</u> Search "Quantitative Structure-Activity Relationship"[MeSH]	18:06:15	<u>2193</u>
<u>#1</u> Search "HIV Envelope Protein gp120"[MAJR]	18:02:04	<u>2906</u>

Structure Summary Printout for 1GC1

Title	HIV-1 GP120 CORE COMPLEXED WITH CD4 AND A NEUTRALIZING HUMAN ANTIBODY				
Authors	Kwong, P.D., Wyatt, R., Robinson, J., Sweet, R.W., Sodroski, J., Hendrickson, W.A.				
Primary Citation	Kwong, P.D., Wyatt, R., Robinson, J., Sweet, R.W., Sodroski, J., Hendrickson, W.A. Structure of an HIV gp120 envelope glycoprotein in complex with the CD4 receptor and a neutralizing human antibody. <i>Nature</i> v393, pp. 648-659, 1998				
History	Deposition Date: 1998-06-15 Release Date : 1998-07-08				
Experimental Method	X-RAY DIFFRACTION				
Parameters	Resolution[]	R-Value (%)	R-Free	Space Group	
	2.50	0.21 (obs.)	0.30	P 2 2 2 1	
Unit Cell	Length []	a	71.64	b	88.13
	Angles []	alpha	90.00	beta	90.00
Molecular Description					
Functional Class	COMPLEX (HIV ENVELOPE PROTEIN/CD4/FAB)				
Source	Polymer: 1, Scientific Name: HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 Common Name: HIV-1 Expression System: DROSOPHILA MELANOGASTER Polymer: 2, Scientific Name: HOMO SAPIENS Common Name: HUMAN Expression System: CHINESE HAMSTER OVARY CELLS (CHO), CRICETULUS GRISEUS Polymer: 3, Scientific Name: HOMO SAPIENS Common Name: HUMAN Expression System: EPSTEIN-BARR VIRUS IMMORTALIZED B-CELL CLONE FUSED WITH A MURINE B-CELL FUSION PARTNER Polymer: 4, Scientific Name: HOMO SAPIENS Common Name: HUMAN Expression System: EPSTEIN-BARR VIRUS IMMORTALIZED B-CELL CLONE FUSED WITH A MURINE B-CELL FUSION PARTNER Polymer: 6, Synthetic Construct Polymer: 7, Synthetic Construct Polymer: 8, Synthetic Construct Polymer: 9, Synthetic Construct				
Chemical Component	Identifier	Name		Formula	
	NAG	N-ACETYL-D-GLUCOSAMINE		$C_8H_{15}NO_6$	
	FUC	FUCOSE		$C_6H_{12}O_5$	
SCOP Classification	Fold	Superfamily	Family	Domain	Species
	gp120 core	gp120 core	gp120 core	gp120 core	Human immunodeficiency virus type 1
CATH Classification	Domain	Class	Architecture	Topology	Homology
	1gc1C1	Mainly Beta	Sandwich	Immunoglobulin-like	Immunoglobulins
	1gc1C2	Mainly Beta	Sandwich	Immunoglobulin-like	Immunoglobulins
	1gc1G0	Mainly Beta	Complex	HIV Envelope Protein Gp120; Chain G	HIV Envelope Protein Gp120; Chain G
	1gc1H1	Mainly Beta	Sandwich	Immunoglobulin-like	Immunoglobulins
	1gc1H2	Mainly Beta	Sandwich	Immunoglobulin-like	Immunoglobulins
	1gc1L1	Mainly Beta	Sandwich	Immunoglobulin-like	Immunoglobulins
	1gc1L2	Mainly Beta	Sandwich	Immunoglobulin-like	Immunoglobulins



Go Terms	Molecule	Molecular Function	Biological Process	Cellular Component
	ENVELOPE PROTEIN GP120	1. structural molecule activity	1. none	1. viral envelope
	CD4	1. none	1. immune response 2. cell adhesion	1. membrane 2. integral to membrane
	ANTIBODY 17B	1. none	1. none	1. none
	ANTIBODY 17B	1. none	1. none	1. none
	SUGAR (2-MER)	1. none	1. none	1. none
	SUGAR (2-MER)	1. none	1. none	1. none
	SUGAR (2-MER)	1. none	1. none	1. none
	SUGAR (2-MER)	1. none	1. none	1. none